

WHAT IS CLAIMED IS:

1. A method for managing performance data about a network for graphical display, wherein the performance data is in the form of data values, wherein method uses a plurality of bins for maintaining a count of instances that data values are within a current range, wherein each bin maintains a number of instances that data values are within a particular portion of the current range, wherein each portion has an equal size, and wherein the method further uses an array for maintaining performance data values that are not within the current range, the method comprising the steps of:

receiving a data value;

determining whether the data value is within the current range;

incrementing the number of a particular bin of the plurality of bins, if the data value is within the current range, wherein the particular bin is selected based on the data value;

storing the data value in the array, if the data value is not within the current range; and

scaling the current range and the size of the portions, if the data value is not within the current range.

2. The method of claim 1, further comprising the step of:

repeating the steps of determining, incrementing, storing and scaling for each received data value.

3. The method of claim 1, further comprising the step of:

formatting the numbers for graphical display based on the size of the portions and the current range.

4. The method of claim 3, further comprising the step of:

displaying the formatted numbers as a graph to a user.

5. The method of claim 1, wherein the network transports data packets, and the data values are latencies in transporting the data packets through the network.

6. The method of claim 1, further comprising the step of:
determining an amount of jitter that the network is incurring from the numbers of the plurality of bins.

7. The method of claim 1, further comprising the step of:
re-calculating the numbers of the plurality of bins according to the scaled size of the portions.

8. The method of claim 1, wherein the plurality of bins are one set of bins of a plurality of sets of bins, wherein each set of bins is formed from one dimension of elements of a two dimensional array, the step of scaling comprises:

incrementing an index to point to a subsequent set of bins in the two dimensional array; and

multiplying the current range and the size of the portions by a factor.

9. The method of claim 8, wherein:

the factor is 2.

10. The method of claim 8, further comprising the steps of:

receiving a subsequent data value;

determining whether the subsequent data value is within the factored range;

5 incrementing the number of a particular bin of the plurality of bins, if the subsequent data value is within the factored range, wherein the particular bin is selected based on the subsequent data value;

storing the subsequent data value in the array, if the subsequent data value is not within the factored range; and

scaling the factored range and the size of the factored portions, if the subsequent data value is not within the factored range.

11. The method of claim 10, further comprising the step of:

re-calculating the numbers of the plurality of bins according to the scaled size of the factored portions.

12. A system for managing performance data about a network for graphical display, wherein the performance data is in the form of data values, wherein the system comprises:

a plurality of bins for maintaining a count of instances that data values are within a current range, wherein each bin maintains a number of instances that data values are within a particular portion of the current range, wherein each portion has an equal size;

an array for maintaining performance data values that are not within the current range;

logic for receiving a data value;

logic for determining whether the data value is within the current range;

logic for incrementing the number of a particular bin of the plurality of bins, if the data value is within the current range, wherein the particular bin is selected based on the data value;

logic for storing the data value in the array, if the data value is not within the current range; and

logic for scaling the current range and the size of the portions, if the data value is not within the current range.

13. The system of claim 12, further comprising:

logic for formatting the numbers for graphical display based on the size of the portions and the current range.

14. The system of claim 13, further comprising:

a display for presenting the formatted numbers as a graph to a user.

15. The system of claim 12, wherein the network transports data packets, and the data values are latencies in transporting the data packets through the network.

16. The system of claim 12, further comprising:

logic for determining an amount of jitter that the network is incurring from the numbers of the plurality of bins.

17. The system of claim 1, further comprising:

logic for re-calculating the numbers of the plurality of bins according to the scaled size of the portions.

18. The system of claim 12, wherein the plurality of bins are one set of bins of a plurality of sets of bins, wherein each set of bins is formed from one dimension of elements of a two dimensional array, the logic for scaling comprises:

logic for incrementing an index to point to a subsequent set of bins in the two dimensional array; and

logic for multiplying the current range and the size of the portions by a factor.

19. The system of claim 18, further comprising:

logic for receiving a subsequent data value;

logic for determining whether the subsequent data value is within the factored range;

logic for incrementing the number of a particular bin of the plurality of bins, if the subsequent data value is within the factored range, wherein the particular bin is selected based on the subsequent data value;

logic for storing the subsequent data value in the array, if the subsequent data value is not within the factored range; and

logic for scaling the factored range and the size of the factored portions, if the subsequent data value is not within the factored range.

20. The system of claim 19, further comprising:

logic for re-calculating the numbers of the plurality of bins according to the scaled size of the factored portions.